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ABSTRACT

A meeting was held to discuss the findings of case studies examining the role of companies in generating qualifications and the training impact of work organization in Germany, Denmark, Spain, and France. New forms of work organization (NFOT) were identified and examined from the standpoint of sources of organizational change, the main areas of organizational change, changes in the means of coordination, the emergence of new occupational groups/categories, and new career dynamics. Discussed next were conditions for developing/transmitting skills and knowledge within NFOT through "discreet" and "explicit" training strategies and training opportunities afforded by NFOT. The place of NFOT in the social dialogue was analyzed. The following conclusions were drawn: the scope open to "discreet" training schemes seems linked to the nature of initial training systems; the traditional grids used to monitor work are no longer sufficient to grasp the complexity of developments in many cases; the issue of validation and certification of training is fundamental and must be reassessed in view of NFOT; the focal issue at present is that of employment; and publicly funded measures (particularly local measures) can have a strong impact on certain companies' ability to produce organizations that produce skills. (MN)

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CEDEFOP panorama

ED 372 244

# Interim report on studies on "The role of the company in generating qualifications: The training impact of work organization"

## Meeting of 31.03. and 1.04.1993

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**Interim report on studies on "The role of the company in generating qualifications: The training impact of work organization"**

**Meeting of 31.03. and 1.04.1993**

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Project coordinator, CEDEFOP Berlin

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**Preliminary note:** This meeting aimed to juxtapose the preliminary conclusions of the draft summary report of the studies mentioned [1] and the conclusions drawn at national level by the research teams. Discussion was based on the presentation of the main trends identified in four countries [2] covered by the study and on the presentation of preliminary conclusions of the draft European Summary Report. The researchers involved in the studies, representatives of the social partners and an OECD representative took part in the meeting.

We wish to stress that this report on the meeting does not utilize all the information contained in the studies and that the conclusions reflect, to a certain extent, the relative importance of the information presented at the conference in the four presentations cited, each of these being based on detailed analyses of a case study. The final report, which will use all the information, will without doubt balance these conclusions and increase the value added at European level of the analyses carried out by making a comparison of conclusions based on the mode of operation in the various countries. This aspect could not be examined in depth during the meeting.

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1 This draft was drawn up by J. DELCOURT, Professor at the Université Catholique de Louvain (B) and P. MEHAUT, Director of Research at CNRS (F)

2 Germany, Denmark, Spain, France; reported on respectively by E. SAUTER (BIBB), P.H. KRISTENSEN (Institute for Organization and Industrial Sociology, Copenhagen), J. PLANAS and A. MARTIN (Autonomous University of Barcelona) and M.C. VILLEVAL (ECT, Université Lumière, Lyon 2)

## INTRODUCTION

All of the work carried out at national and Community level on continuing training, in particular that under the aegis of CEDEFOP on continuing training policy in large companies, demonstrates that the desire to remain competitive currently leads companies to assume an increasing role in developing human resource qualifications. This trend, which some believe signals the emergence of a new distribution of responsibilities between education and production in generating qualification, also involves to a high degree the system of relationships and the content of such activities.

This work also suggests that strategies for developing human resource relations in companies are based upon the interaction of several components, as continuing training organized in a formal manner is but one of the means deployed to manage "new qualifications" which the company thinks it requires. Currently certain organizational models set up by the company aim directly to produce apprenticeship opportunities in increasing the training impact of the work situation and a dialectic is emerging between "formal apprenticeship" (through training organized in a formal manner) and "informal apprenticeship" (work organization and employee cooperation in the production and innovative process).

These new organizational models may assume a variety of forms and, although they may appear to demonstrate converging structural trends, these models cannot be assumed to be the general rule. In view of the fact that the context in which such models emerge varies greatly, only analyses of the mutual relationships between the environment and the company shed light on how organizational models are constructed in a social context and on the opportunities and limitations of transfer, highlighting the environment factors which promote (or, on the contrary, impede) the development of new organizational forms, the particular nature of problems relating to implementing a number of solutions which have been found.

The prime aim of this series of studies, carried out by CEDEFOP in several countries[3], is to identify the impact of trends in work organization on the process of generating qualifications and, particularly, identifying the links between these trends and training and apprenticeship opportunities of both a formal and informal nature. These studies should also provide information on qualification trends within the new organizational forms and should permit hypotheses on the implications of these changes on various training systems. Finally, endeavours will be made to identify new issues which these trends present to research and political decision-making in training at various levels.

These studies have a number of dimensions:

- A macro analysis aiming to relocate the action of those involved in the different countries vis à vis the institutional and environment context in generating qualifications. The analysis aims to comprehend, in both directions, the interdependence of the corporate environment and company practice.

- A micro analysis based on 51 company case studies aims to identify the impact of moulding and generating "new qualifications" based on the analysis of the organizational changes carried out by the company.

- Finally, a comparative analysis endeavours to identify at national and community levels converging and diverging trends in current changes and to determine the impact of these changes particularly on training systems and changes in qualifications.

The case studies were selected in a number of countries based on the criteria "organizational innovations of a relatively stable nature". The criteria of "regional

[3] Germany, Belgium, Denmark, Spain, France, Italy, Netherlands, Portugal, United Kingdom

dimension" and "sector" were also taken into consideration in the selection although this is not representative in nature. The case studies focus particularly on large and medium-size companies and information was gathered for the most part through interviews with a number of partners supplemented by documents which the companies put at our disposal.

## NEW FORMS OF WORK ORGANIZATION (NFOT)

### Sources of organizational change

Organizational change found in the companies studied is linked, basically, to increasing competitiveness in terms of production, quality and price, which has repercussions for sub-contractors in terms of the demands placed upon them.

Product innovation determines the company's ability to survive and, at times, the companies examined gave the impression of being laboratories. Mass production has not disappeared but the company must react quickly and flexibly to adapt to changing demand.

The quest is for products of increasing quality and new standards, in particular international quality approval.

Organizational change is also brought about by the fact that education policy in recent years has raised the basic level of education and, at the same time, has brought about a change in attitude and expectations in employees vis à vis work. It is to this that the company is attempting to respond.

Finally, demographic forecasts would suggest that the number of young people entering the labour market will decrease while the group of "45-64 year olds", who are receiving less training at present, will increase significantly. They will become

the target of qualification measures and forms of organization which produce qualifications may provide at least in part a response to this.

**The main areas of organizational change**

Organizational change is far from identical in companies and countries. The analysis of the case studies carried out give insight into a number of aspects of these changes without allowing generalization.

In several cases the company operates just-in-time production and is driven by the market. For example, the case of the company producing plastic parts for the automobile industry in France (F1) where development of an organization focusing on just-in-time production has led to the closure of two of the company's factories and to the set-up of a new factory having extremely linear organization to obtain maximum transparency of flow. Production is governed by downstream demand and is characterized by tele-transmission and daily supplies to customers. 80% is kanban production.

As J. Delcourt stressed, companies are attempting to reduce production time, sales time, the time spent on reprogramming production machinery and the time spent introducing innovation. Stocks and current production size are being reduced. The optimization of machine time is becoming imperative and work organization is based on a two-fold goal of materials and information. Non-productive time is being reduced through developing weekend and night work. Maintenance carried out on machines formerly stopped for this purpose is being done increasingly while the machines are in operation. The quest for total quality and maximum productivity in just-in-time production has introduced a number of new constraints on the production plant: "zero error" in transmitting information, "zero breakdowns", "zero mistakes", "zero scrap", "zero delay", "zero dead time", "zero accidents", "zero absence" and "zero strikes".

In a number of cases attempts are made to increase flexibility, particularly with regard to flexibility of a qualitative nature affecting product assembly and the levels of productivity. One example is the civil engineering company producing pumps, valves and other parts in stainless steel in Denmark (DA1) where production teams currently produce some 14,000 different parts which can be assembled in various combinations to a final product. In this company only one-third of production for a given month is forecast at the beginning of that month and, in certain cases, they have only twelve days.

In a large number of cases, the company tends to operate as a two-fold network. It is becoming a market where all employees are customers and the suppliers of other employees, teams often resemble independent sub-contractors under one factory roof. Secondly, the existence of an external network is becoming essential to guarantee "zero stock" and "zero delay". Taking the example of the company F1, the development of new planning methods has produced a two-fold joint venture, one within the company - and projects encompassing technicians and engineers from the planning office, the methods department and production services - and an external relationship between the company and large car manufacturers. It has centralized the planning offices in the car manufacturer's planning and design department to produce innovation.

In a large number of companies there is a quest for versatility and multi-skilling of machine operators, through rotating between work posts in the enterprise, through ways of involving employees at their own request, of stimulating workers and through "discreet" training schemes ("informal" through work experience) and "explicit" (training schemes of a formal nature). In these instances one gains the impression that the division of labour is being redefined with a new functional distribution and three main trends closely linked to each other:

- shortening the command line
- development of team work

- integration of tasks

Nevertheless, it should be recalled that if the quest for versatility is to be a characteristic of new organizational forms for large companies, this very characteristic has been prevalent in medium-sized enterprises for a long time as they are less dependent than others on the Taylorist division of labour.

**Changes in means of coordination, the emergence of new occupational groups and categories**

The search for versatility and autonomy and teamwork which can be identified in certain organizational forms calls for a re-allocation of traditional functions and the occupational groups and categories associated with these. This was stressed, particularly, by the Danish and Portuguese research teams where the traditional demarcation between skilled and unskilled workers, whose occupational profiles seem to change, is being smudged.

As work organization foresees teamwork, these groups are usually made up of a decreasing number of workers with different qualifications, some are skilled, others are unskilled - who as a group are entrusted with a certain number of tasks. Within the teams the tasks of skilled workers and those of the unskilled do not differ fundamentally and all the members of the group should be in a position to take on different tasks including qualitative and quantitative management of production (generalized self-management). Generally, the members of the group receive similar salaries.

Taking the example of the German company in the automobile sector (D1), the various functions (group management, electrician, quality control, machine operator) in an assembly unit can be carried out by all the members of the group and they are in the position to stand in for each other. In addition, maintenance in the company is de-centralized and 80% of repairs are carried out by the group. Only extremely

complicated repairs are taken over by the central maintenance department. The group also arranges holidays, work distribution and replacement in case of absence. This is often a source of conflict.

Often the teams have a spokesman, who is elected by the group, and who does not necessarily receive more pay. When conflict arises it is the spokesman in the team who takes decisions regarding agreements with other groups in the company and who is the spokesman with the responsible supervisor. The supervisor only intervenes when the group cannot resolve conflicts itself.

In this type of structure, which can be found in several case studies, the command line seems to play a subordinate role and the supervisor seems to have less powers although his role as tutor and trainer of apprentices seems to be more pronounced.

Frequently supervisors are not directly involved in production work, giving them greater scope in relation to the group and particularly with regard to resolving conflicts. In a number of cases (e.g. F1) there is almost daily negotiation between the supervisor and the employee on ways of improving his work, his time rhythm and the quality of work: to some extent this could be termed a contract between the supervisor and the employee.

**New career dynamics**

The career opportunities opened by new organizational forms are by no means identical in the various countries. While, in certain instances, these organizational forms may seem to cause career blockages, as stressed by the English and Spanish teams, on the other hand, as the German and Belgian research teams pointed out, new forms of organization seem to open career prospects for certain categories of workers, prospects which the earlier organizational forms did not offer.

Generally, the impression arises that in NFOT the issue of career advancement is

expressed in different terms. The career path is no longer a succession of standardized jobs within relatively stable systems but a smooth progression in the tasks allotted to workers and changes in job content. There is a career continuum (as opposed to the changes clearly pointed out) in which individuals evolve in line with their abilities to "carry out other tasks".

As the Danish research team pointed out, certain forms of careers within new organizational forms seem to be fairly far removed from the traditional structure of promotional paths in the former organizational forms. One could almost speak of "diagonal" careers as opposed to traditional "vertical" careers where mobility within the same formal hierarchical level is the distinguishing feature of an individual's career and opens up opportunities. In a number of these organizational forms it is possible to "make a career" while remaining at the same workplace and carrying out the same activities.

This hypothesis, which is in all likelihood of limited significance, draws to mind the emergence of a new career concept where the importance of seniority decreases and where knowledge of various sectors of the individual's ability to prepare them for the internal labour market in view of the fact that internal mobility is, in real terms, "horizontal" mobility.

For the social partners such trends raise the issue of coping with matters relating to occupational advancement and of how to recognize, in collective agreements, the individual's progression which is difficult to locate in a stable system.

## THE DEVELOPMENT OF SKILLS AND KNOWLEDGE IN NEW ORGANIZATIONAL FORMS

As P. Méhaut pointed out in all the case studies the procedure of promoting skills and knowledge is relatively new (at times causing "old skills" to disappear) and may assume a variety of forms.

1. The process of recognizing and bringing forth internal and external skills which already existed in the organization, were harboured by individuals but were not used and not recognized. These latent skills concealed by the older organizational forms are now recognized in certain new organizational forms. For example, internal skills linked to maintenance or external skills such as writing and communication skills.

2. Of extending skills through adding skills belonging to related occupational groups, skills which are now required in the search for versatility. For example, when the barrier is raised between production and maintenance or when electronic, mechanical and management skills are combined. This combining of skills is not a simple addition: through accumulating skills their nature is transformed and restructured to form a whole which is greater than the constituent parts.

3. Creating new skills, either linked to production in high-tech companies or to restructuring skills making individuals the bearers of qualitatively new skills produced in the company.

These skills are "gained" through versatility, the redistribution of functions. through making their acquisition obligatory, through the constraints of just-in-time production and through information flow in the enterprise, etc. One of the major issues in restructuring skills is the way this focuses on product and market. In the majority of cases this restructuring of skills takes place within the production unit: mastering all characteristics of the product is becoming a central element of occupational skills. At the same time market limitations have an impact in the production process and attention focuses on the product as a commercial entity (as opposed to a technical entity) which assumes that groups of employees have knowledge of the product's market and its limitations.

**Conditions for transmitting skills**

The case studies show a certain number of organizational factors which exert an influence on the process of transmitting skills.

1. Managing the relationship between autonomy and prescribing work tasks. The more work is prescribed the less scope remains for acquiring new skills. In new organizational forms there is a constant taut relationship between the search for greater personal autonomy and prescribed tasks even if this refers to quality and economic aspects.

   One of the French research teams pointed to the risk of a re-Taylorisation brought about by procedures relating to quality approval: to attain certain international standards their is a trend towards fixing the tasks of employees in the production process and of laying down their functions and their duties.

2. Management of apprenticeships: where, when and at what juncture are "informal apprenticeships" , "discreet training", "formal apprenticeships" or "explicit training" organized? A company's ability to simultaneously manage training, planning and production and its ability to set-up a coherent mechanism for planning and organizing such sequences (often under severe constraints) are essential for producing efficient apprenticeships.

   The case studies reflect a great number of different situations and even "negative organization" when, for example the company organizes training upstream to organizational change (and thus not allowing workers to apply at the proper time what they have learned) or when the company makes recourse to training following completion of organizational changes.

   In addition, apprenticeship seems to be greater where trends can be forecast and employees have the opportunity to formulate common reference points

(e.g. quality or innovation) and where they are assisted in formulating new classifications. This would imply agreed commitment of employees when aims are redefined and innovations designed.

3. The ability of an organizational form to motivate employees to cooperate (in a system which does not offer "traditional rewards"), its ability to successfully manage the process of dividing up savoir faire and that of hierarchical change. Redistributing savoir faire involves relocating occupational groups in relation to each other, it entails the loss of power in certain groups and possible gains in others. For certain groups (see the case of the supervisor) organizational change has a particularly destabilizing effect. If such destabilization is not countered by new opportunities and status it may often be a major restraint to the process of transferring knowledge and savoir faire.

   As the German research team point out, the transfer of knowledge and skills between the members of a group depends to a large extent on the acceptance of this redistribution of knowledge by those who impart it and on the existence of a spirit of cooperation. Such cooperation does not come about by itself and the dangers of marginalization within a group, in terms of its relationship to other groups, are considerable.

4. The ability of an organizational form to take a positive approach to malfunctions. If the company views malfunctions as a means of bringing about improvement, apprenticeship opportunities are broader in scope. The more employees are called upon to exercise their judgement, the more akin the situation is to apprenticeship. But this apprenticeship assumes the need to take risks and for employees to accept this uncertainty they must be permitted the right to make mistakes. There is, therefore, a need for a compromise between this right and an organization based on "zero faults".

5. Generalising knowledge transfer also depends on the percentage of individuals involved in new forms of organization in relation to the entire staff. Rarely are new forms of organization introduced across the board. Its extent varies from one company to another but, generally, in assembly and fitting work the organization remains more "Taylorist". This provokes tension between groups and the company's ability to resolve such tensions is of fundamental importance. If change instigated where there is a preponderance of highly qualified young people the chances of conflict increase and there is a threat to producing a healthy climate for apprenticeship.

6. The stability of change. Innovation resulting from new classifications, new standards, new routines and overcoming routines creates a situation for apprenticeship. But, if changes are too frequent, the employee can no longer acquire these classifications. The issue at stake is to succeed in striking a balance between autonomy, the amount of innovation and the need for stability and transition.

7. The way teams are made up. Teamwork is beneficial to apprenticeship to the extent that it equips groups and individuals with different skills. If a compromise cannot be reached on employees' occupation affinity there is little likelihood of teamwork. To facilitate cooperation there is a need for a basis of discussion and a common language. If occupational profiles are too far removed this may impede the apprenticeship process.

8. The company's ability to overcome and eliminate two-fold barriers: an internal barrier within the company through project groups and making production linear thus creating favourable conditions for cognitive approaches and for developing an apprenticeship system where individuals resolve problems together; an external barrier, developing partnerships between the company and its customers (thus identifying sources of malfunction) and

between the enterprise and available training measures.

9. Recruitment strategies. In introducing new forms of organization the company may move employees or recruit internally. In the majority of cases changes are instigated using internal resources. The means of mobilizing such resources may prove to be of a determining factor in developing apprenticeships.

   In other cases the company draws upon external recruitment, normally of younger staff with a higher level of education but less experience. For example, the case of supervisors who are made up of two categories of employee, young people who have high technical and, at times, even training skills but little experience and by older supervisors who had been promoted on account of their seniority and experience in the previous organizational form. Such divergencies, to which must be added disparities in status and age, may cause tension which hinders the development of cooperation and the transfer of knowledge.

**Strategies for developing knowledge: "discreet" [4] and "explicit" [5] training**

The instigation of new, organizational forms of work is usually accompanied by an important retraining process as these studies would suggest. In this process "discreet" training schemes are of increasing importance, sometimes at the cost of "explicit" training but in combination with this. Combining formal and informal training schemes seems to be a better way of providing a varied response to needs for training and qualification which are, themselves, varied on account of the heterogeneous nature of the groups to be set up.

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[4] This, it should be recalled, is "informal" training through work organization and cooperation between employees on the production and innovation process.

[5] Training schemes organized in a formal manner

Nevertheless, the difficulties with which research teams are confronted in making a precise distinction between "discreet" and "explicit" training schemes must be stressed.

The utilization of different forms of training following organizational change depends, to a large extent, on corporate strategy in managing the relationship between technical innovation, work organization, training and management. A number of examples are to be found in the studies pointed out by one of the Spanish research teams: one strategy consists in introducing technological innovation in old organizational forms. In this instance use is made of selective formal training in connection with new technologies. A second strategy consists in linking technical innovation and work organization without striving for global management of the three elements. Finally, one strategy which maintains this link and integrates formal training with a formal type of "discreet" training and with the development of internal means of communication.

The increase in "discreet" training schemes coaches on the specific organizational form of a company and on the need to set up groups: as one of the French research teams pointed out, it is "discreet" training which produces cohesion in a team as such training is based fundamentally on training apprentices to cooperate. Such an apprenticeship is of fundamental importance in managing innovation and risks.

In addition, new organizational work forms are becoming less fixated on manufacturing than previously and work and training are becoming increasingly inseparable: as the German research team stressed, new organizational forms require new qualifications particularly in terms of autonomy, initiative, responsibility and communication. Such qualifications can only be acquired at the workplace through cooperation.

Even if it is not possible to assess precisely the cost of discreet training (which is difficult to identify and to quantify) it may be said that their costs remain low in

relation to the costs of "formal" training. At a time when companies aim to reduce training costs, this type of training may be of considerable advantage.

Finally, when a company wishes to implant a new organizational model, even if it has been tested elsewhere, it needs to adapt to this as regards its own history and its manpower. "Discreet" training seems to play a fairly important role in this adaption.

The areas encompassed by training encompass occupational components (in the more traditional sense of the word), communication, management components (working time management, management of product flow, trouble shooting). Several of the case studies show that these forms of discreet apprenticeship are being used, not solely in apprenticeship of savoir-faire but also the acquisition of general and theoretical knowledge. This would seem to suggest that the forms of "discreet" training encountered differ from traditional on-the-job apprenticeships.

The main means of carrying out "discreet" training which have been listed are the "team projects" which consist normally of think-tanks whatever their objective; on-the-job training, "mutual training" and through giving employees different skills; recourse to human capital and self-training where this is not provided in formal training schemes.

With regard to "explicit" training schemes, the studies show that use of such training varies: examples where no use is made of this, others where great use is made of this and those where "discreet" training and "explicit" training supplement each other, as has already been stated. The emergence of new organizational forms gives rise to new trends in continuing training, as pointed out by the German research team.

Progressive transition to a philosophy of requesting training: to attain a balance of qualifications within teams and to guarantee involvement of all team members in the various tasks, requests for continuous training for unskilled and semi-skilled workers

is increasing in importance. This may help to reduce the segmentation previously found in continuing training which corresponds, more or less, to the segmentation visible on the labour market.

Expanding the qualifications offered within teams promotes development of individual training strategies (coaching), it leads to an increase in the importance of "quality circles" and to distance learning, all of which are integrated into the work process within the team.

The decentralization of training; while the guidelines for training policy are usually defined on a central level, a majority of case studies show that decentralized decision-making is increasing. This entails considerable change in terms of "selection" and of training organization on the part of the enterprise.

There are two parallel aspects to continuing training, an interlinking of internal and external training which supplement each other. This involves two trends: bringing training back inside the company often accompanied by a transition from formal to informal training; and out-sourcing training through reverting to an external training offer. In certain instances the company's internal training structure is exported and located on the training market. This would point, on the other hand, to giving a formal aspect to informal knowledge existing in the company.

Changes in organization also have important implications for staff responsible for continuing training. To the extent that training activities change in the organizations, trainers progressively become animators of training procedures integrated in the workplace, and counsellors in the decision-making process of the company. Secondly, bringing training back inside the company increasingly leads the managers in operational sectors - who are not trainers in the traditional sense of the word - to involve themselves in "formal" and "informal" training.

The increase in explicit training schemes and the increase in the duration of this

training leads to developing means of sharing the cost between the company and the individual in a variety of ways: the enterprise may pay training but the individual follows the courses in the evening; the company may pay training but the individual following the training course sacrifices his free time for half of the course; or the enterprise may give training leave but the individual must pay for training. In a large number of companies forms of co-funding are increasing.

Investment in continuing training provokes on the part of the enterprise the anxiety that this investment may leave the company in view of the fact that it increases the external mobility of workers. This, on the one hand, explains their reticence with regard to certification and, as the Danish research team pointed out, often causes them to have the knowledge acquired by each worker imparted to as large a number of individuals as possible to guarantee the survival of this knowledge within the enterprise and, thus, the survival of work organization.

**The training opportunities afforded by NFOT**

As already mentioned in the majority of organizations studied there is evidence of a certain ability to produce new skills and to broaden access to these skills for certain categories of worker, who in the past were excluded from continuing training.

Overall, in the case studies the opportunities for "discreet" training and "formal" training seem to be increasing. This would suggest that there is relatively little discrimination in access to training and in developing qualifications as was pointed out by the Belgian research team among others.

From analysis of all the case studies and although it is evident that training has a variety of effects on members of a team, the impression emerges that "discreet" training is less selective in terms of apprenticeship. Apprenticeship opportunities, even for those experiencing greater difficulties, seem to be greater in "discreet" training forms than in "explicit" training where selection procedures seem to be more

stringent.

Nevertheless, care should be taken not to generalise the qualifying aspects of new organizational forms of work.

The number of workers involved in organizational change is limited. As one of the French research teams pointed out, a new organizational form is rarely spread throughout the company: usually it is an incomplete experimental phase, the long-term consequences of which are unknown and there is a mingling of new and old forms of organization.

In few cases was there evidence of a simultaneous approach capable of assuring a temporal coherence between training, learning and work. For example, there is reticence in involving production workers in managing and designing innovation and this makes their apprenticeship and skills acquisition more difficult.

Supervisors are a group which has been destabilized in view of the fact that important changes have been made to their role and their function in the majority of cases without adequate preparation for new functions. Even in new forms of organization the role of the supervisor in knowledge transfer and in the development of teams is of paramount importance.

The creation of teams and the shortening of the command chain, which have been observed in several cases, require reformulation of the groups tasks and of the role of the team members, new identities must be found, new organizational areas must be set up for taking decisions and assuring communication as well as for promoting cooperation between the members of each group. This has not always been achieved as evidenced by the Danish company producing hearing-aids (DA2) where the initial impetus of organizational change was, to some extent, neutralized at the time of the survey on account of the pressure arising from competition between individuals and teams, which the new organizational form was not able to counteract.

As one of the French research teams pointed out, cooperation takes place in an area where competition and rivalry causes problems. From the point of view of personal motivation the company falters between using too basic productive means of investing in labour, cooperation and competition. Both these depend on the way in which new market constraints and new technologies exert pressure in one direction or another. Developing cooperation in certain areas normally results in developing competition in others and this, again, produces an array of phenomena which are difficult to master.

Paradoxically, it must be said that without an individual approach ????? and that the recognition of individuals and the roles of these individuals is a precondition for cooperation. At times customizing paths results in customizing qualifications which can impede transferability between team members.

One is faced with a situation where the great number of standards, controls and external constraints which are becoming increasingly complex and rigid may contradict autonomy and self-management, which should be advocated and which remain essential factors in apprenticeship. Today, maintenance manuals dictate what should be done and when and how it should be done. Quality standards are becoming increasingly complex and stringent as are the provisions relating to plant security and the handling of a certain number of products and materials.

## NEW FORMS OF ORGANIZATION AND THE SOCIAL DIALOGUE

The trade union presence and its involvement in installing new organizational forms seems to be fairly limited although in certain countries the trade unions are automatically involved in formulating the training programmes.

The introduction of new organizational forms are part of more involved policy where it could be assumed that it would provoke union participation. Nevertheless, as was pointed out by one of the Spanish research teams, this is often viewed by the

company as a threat to its traditional powers with regard to the production process in a similar fashion to company co-management by the workers.

In spite of this initial retreat, due in part to a number of experiments, added responsibility and the raising of qualifications acquired in an informal way was not reflected in a rise in salary, the trade union stance, in favour of controlling experiments with the development of new organizational forms, is becoming increasingly unequivocal today.

Trade unions are witnessing progressive elucidation of the aims, missions and the involvement mechanisms set up when organizational changes are introduced. They attempt to assure an automatic of information on all problems resulting from introducing these new organizational forms, to official bodies within in the enterprise.

In the quest for total quality of the product by the company and the need to satisfy consumer demands and to ensure optimal use and efficiency of plant, the demand also arises for a total quality of working situations and conditions, labour safety and hygiene. In addition, it would seem that trade unions are calling strongly for the development of forms of solidarity across company networks, in particular with regard to training and adherence to safety standards by sub-contractors (Delcourt, J.).

Among the issues thrown up by the development of new forms of organization for social dialogue, that of validation of skills acquired through work experience is mentioned frequently. In a number of countries this is becoming a focal point of collective bargaining as was stressed two of the research teams (English and Spanish).

## CONCLUSIONS OF THE MEETING

This report also cites certain conclusions which were drawn in the course of the

meeting. Nevertheless, it should be recalled that these conclusions have been strongly influenced by the case studies examined and that these had been selected on account of their "exemplary" nature.

1. The scope open to "discreet" training schemes seems linked to the nature of initial training systems. In Germany the characteristics of the initial training system seem to favour the development of forms of organization which produce skills and which place the emphasis on apprenticeships at the workplace. This is less evident in those cases where initial training is, for the greater part, carried out in schools. Nevertheless, from an analysis of case studies the impression arises that the dialogue between industry and the world of education is always difficult to establish.

   The way in which informal apprenticeships are viewed in various countries is indicative of the influence of national context and educational traditions. In certain countries apprenticeships are viewed as the means used by companies to evade the costs of continuing training and to produce qualifications which are not remunerated. In other countries informal apprenticeships are seen as a strategy producing the skills forecast and as a means of imparting skills to those who had not been catered for by formal continuing training schemes.

   For example, in Germany this type of training which is decentralized and informal seems particularly well adapted for the unskilled and is viewed positively on account of the fact that it provides the opportunity for groups which previously had been deprived of continuing training to acquire occupational skills through work.

   In Spain, there seems to be a selective segmentation of qualifications within the company where the group which benefits most from "formal" and "informal" training schemes continues to be the one with the highest level of

basic training.

2. As P. Méhaut pointed out, the traditional grids used to monitor to work are no longer sufficient to grasp the complexity of developments in a number of the cases studied. In this context the traditional divisions can no longer serve as the unit of measurement as manpower is developing and groups whose career prospects, occupational identities and relationship to work and employment are changing. In the new forms of organization there is a transformation of occupational identities of staff, of their position in relation to employment and the company. These new occupational identities are transversal to the classic structures of the former qualification structures.

In a large number of cases attempts are underway to reclassify manpower in the old categories rather than to create new ones. Assimilations are made to preserve these categories and classifications which may be termed traditional and recognized because of a lack of more modern mechanisms. In other cases, fewer in number, the traditional occupational categories and classifications are being questioned and new denominations and descriptions, which diverge from the old classification systems, are being sought.

Although at this stage the studies do not allow us to draw conclusions as to whether one is going to continue to use the current classifications or search for new denominations, the analyses would suggest that attention is focusing increasingly on finding new mechanisms to a greater extent than transposing current trends.

3. The issue of validation and certification of training is a fundamental one today as was pointed out by P. van den Dool, the Dutch Government representative on the CEDEFOP Management Board. Nevertheless, certification practices in "explicit" training, in the classic sense of acquiring a certificate validated or attested by a regional or national body, seem limited

and are almost always viewed by the company as a risk factor to the extent that they generate potential mobility.

The case studies show that the issue of validating skills acquired through "discreet" training can no longer be tackled in conventional ways. As the German research team stressed, new organizational forms are not "conceived" in order to produce qualifications which could be certified. The company considers that what the employee learns in the company is part of company strategy and the training impact of work situations are not regarded as a means of qualifying the individual but as an apprenticeship mechanism for the company as a whole, the aim being to raise quality throughout the company. Nevertheless, it should be recalled that the nature of the initial training system in Germany may produce such a specific interpretation.

This issue also raises the problem of the durability and transferability of these skills which risk being specific to a particular company, a factory or technological area and thus "difficult to transport" to the exterior. This was pointed out by the English and Danish research teams. "Informal" qualification paths' inability to produce external mobility raises the question of the added value of such paths as an "alternative" means of qualification for those who are excluded from the traditional training schemes which are potential generators of external mobility. One such example is that of the "Betriebsfacharbeiter" (skilled factory worker) and the "Betriebsmeister" (factory foreman) (D1), which are qualifications recognized by the company but not necessarily transferable to the external market.

This issue is particularly relevant in countries where workers receive qualifications to a large extent through informal procedures (see the case of Spain), where there is no "generalized" qualification environment and no "remunerative" recognition as is the case in Germany.In such a case, the need to give a formal character to "informal" skills is becoming an important pay issue.

In a number of cases, in one form or another, a certain type of validation exists in terms of employment: in the majority of cases studies the companies are reducing manpower and "the reward" for training efforts is maintaining employment.

One form of validation which is found in a number of instances is wage increase linked to participation in training without this necessarily implying a change in employment or promotion. As J. Delcourt recalls, in means of motivating workers to acquire skills and knowledge as opposed to individual reward schemes which were developed in Japan and Sweden (bonuses for initiative and for training and qualification), the German case would suggest that attempts are not made to base salary on the acquisition of skills but rather to remunerate "team work" thus opting for an non-differentiation in productivity and lack of differentiation in pay.

Promotion is another form of validation, albeit that promotion prospects in the classic sense of the vertical mobility have been reduced substantially. As was seen, there are forms of career development which cannot be termed promotion in the traditional sense of the word but which are viewed positively by employees in certain countries.

Where both individual and team commitment are a prerequisite for the success of the system the way in which such commitment is induced in a system which can no longer offer traditional salary rewards and vertical mobility, takes on fundamental importance. This issue is treated in a variety of ways in the different countries. In Denmark, for example, the trade union structure which organizes unskilled workers and skilled workers, allowing permeability between the two levels are in favour of a break between traditional career structures.

4. As R. Miller, the OECD representative, pointed out the focal issue today is

that of employment. Although this was not the aim of the CEDEFOP analysis it re-emerges throughout the cases studied. In terms of employment, in the majority of cases, new forms of organization have developed following a phase of restructuring and reducing manpower, of making replacements and switching staff. It is for this reason that, frequently, new organizational forms are considered to be unselective. The question currently arising is whether new organizational forms, on account of economic efficiency, are in themselves generators of employment or, on the contrary, generators of unemployment. At this stage of analysis it is difficult to draw conclusions on this matter.

From the point of view of internal selection, the team itself plays a regulatory role which may lead to the exclusion of the team members who do not perform well. The requirements placed upon team work, competition between teams and a call for reaction times which only commitment and continual cooperation can produce. Those who are not committed to attaining the level of the team have great trouble in integrating and frequently teams ask for a member to be replaced who does not come up to the required standard.

This regulatory function of the team, which may motivate members of the team, can also result in a system which is quite selective in nature. In a number of cases categories which previously had a place in the production apparatus have been eliminated. For example, in the case of the Danish bank (DA3) where the team organizational model has eliminated an important group made up of females who had left the labour market for a period and who wished to continue to work part-time; or in the case of enterprise DA2, where horizontal mobility has led to the creation of central teams (the best female assembly workers were integrated step-by-step in the teams which worked well) and peripheral groups. The latter are the first to suffer the consequences when problems arise.

5. It is clear from the analysis of certain companies (particularly in Spain, Denmark and Portugal) that in relation to "explicit" training schemes, publicly funded measures, particularly local measures, can have a strong impact on certain companies' ability to produce organizations which produce skills. This may be through creating opportunities for funding training (for example, the role of the ESF in Portugal) through providing access to training bodies, local training networks, etc. They can also help workers re-establish their social status within the companies.

As P. Méhaut demonstrates, particularly in the case of Denmark where there is a strong coherence between events in the company and the external training environment, and where opportunities exist to undergo training funded by the state. In the case study DA1 the company succeeded in maintaining its original dynamism thanks to state funded continuing training, in spite of the take-over by another company which impeded change. Another example is the company DA3 where local teams, in addition to internal training fixed at central level, followed training courses in local centre (for example training courses in the housing, insurance and new technology sectors) allowing them to respond to the specific nature of local demand.

A network of companies in the electrical and electronic sector in Spain is another example of the effects of public policy at local level. In this network, a large company, specialized in high-technology and automation, was responsible for training workers in small associated companies. When this company stopped providing training the local community took over. Institutional policy linked to the local community seems particularly well adapted to developing training policies for small companies which frequently do not have sufficient training means within their own company.

Nevertheless, in the majority of cases there is an absence of state intervention

with the result that the employment system may aggravate exclusion from the training system and vice-versa. This seems particularly important where there is a corresponding segmentation between initial training, continuing training in the companies and the labour market.

## CONCLUDING REMARKS

!: There is an urgent need for EC Member States to find solutions to serious problems of unemployment and increasing marginalization with which they are confronted. In this connection P. van den Dool and R. Miller insist that the conclusions of these studies should act as a pointer for Community initiatives in vocational training.

Nevertheless, it was recalled during the meeting that, at this stage, care should be taken in translating these findings into political initiative. This study is but one stage in relation to the broader aim of identifying the role of the various protagonists in generating qualifications. Secondly, as the range of case studies were not representative, generalizations should not be made nor can distinct differentiations be made with regard to sector or size of company. The studies also show that one should strive for differentiated responses which take into account the specificities of the national context and not for a global community response.

2. Throughout this report the use of terms such as "competences", "qualifications", "forms of organization which produce skills" could give the impression that such terms are common to all countries. In reality these expressions have a different meaning in each country, accounting for the fact that frequently in discussions of such issues confusion arises. This meeting was no exception. Efforts to clarify these will be made in the comparative analysis in the European Summary Report.

- Report drawn up by Fernanda Oliveira Reis -

CEDEFOP - European Centre for the Development of Vocational Training

**Interim report on studies on "The role of the company in generating qualifications: The training impact of work organization" Meeting of 31.03 and 1.04.1993**
Fernanda Oliveira Reis
CEDEFOP Berlin

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This meeting aimed to juxtapose the preliminary conclusions of the draft summary report of the studies mentioned and the conclusions drawn at national level by the research teams. Discussion was based on the presentation of the main trends identified in four countries covered by the study and on the presentation of preliminary conclusions of the draft European Summary Report. The researchers involved in the studies, representatives of the social partners and an OECD representative took part in the meeting.



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**Meeting report**

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